

PHNL030329

PCT/IB2004/050219

CLAIMS:

1. Record carrier of a writable type for recording information by writing marks in a track on a recording layer via a beam of radiation entering through an entrance face of the record carrier, the marks being detectable during scanning the track via the beam, the record carrier comprising
 - 5 - at least a first recording layer (40) and a second recording layer (41), the first recording layer being present at a position closer to the entrance face (47) than the second recording layer, and
 - a transparent spacer layer (42) between the recording layers,
 - each recording layer comprising a pregroove (14) indicating the position of the track, the
 - 10 pregroove exhibiting a wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, the wobble exhibiting a wobble modulation for representing control information, and
 - the pregroove on the first recording layer (40) extending spirally in a first direction and the pregroove on the second recording layer (41) extending spirally in a second direction
 - 15 opposite to the first direction for constituting a multi-part recording area (54,57) interrupted by an intermediate zone that physically is constituted by a first intermediate part (55) located at the end of the first recording layer and a second intermediate part (56) located at the start of the second recording layer, the recording area being preceded by lead-in information (53) located at the start of the first recording layer and being followed by an ending part for lead-out information (58) or further intermediate information located at the end of the second recording layer,
 - a lead-in part of the pregroove located at a part of the first recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and
 - 25 - the ending part comprising said wobble modulation representing second control information including recording parameters for the second recording layer.
2. Record carrier as claimed in claim 1, wherein the lead-in part (68) of the pregroove is extending on the first recording layer from a starting radial position (66) to an

PHNL030329

PCT/IB2004/050219

ending radial position (67), and the ending part (69) of the pregroove that comprises the second control information is substantially located between a radial position corresponding to said ending radial position (67) and a radial position corresponding to said starting radial position (66).

5

3. Record carrier as claimed in claim 2, wherein said ending radial position (67) on the first recording layer substantially corresponds to a radial position on the second recording layer where the wobble modulation representing the second control information starts.

10

4. Device for scanning a track on a record carrier (11) via a beam of radiation (24), the track comprising marks on a recordable area of a recording layer, the beam entering through an entrance face of the record carrier, the record carrier comprising

15 - at least a first recording layer (40) and a second recording layer (41), the first recording layer being present at a position closer to the entrance face than the second recording layer, and

- a transparent spacer layer (42) between the recording layers, and
- each recording layer comprising a pregroove indicating the position of the track, the

20 pregroove exhibiting a wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, the wobble exhibiting a wobble modulation for representing control information, and

25 - the pregroove on the first recording layer extending spirally in a first direction and the pregroove on the second recording layer extending spirally in a second direction opposite to the first direction for constituting a two part recording area interrupted by an intermediate zone that physically is constituted by a first intermediate part located at the end of the first recording layer and a second intermediate part located at the start of the second recording layer, the recording area being preceded by lead-in information located at the start of the first recording layer and being followed by an ending part for lead-out information or further 30 intermediate information located at the end of the second recording layer,

- a lead-in part of the pregroove located at a part of the first recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and

PHNL030329

PCT/IB2004/050219

15

- the ending part comprising said wobble modulation representing second control information including recording parameters for the second recording layer,
- the device comprising
 - a head (22) for providing the beam,
 - 5 - recording means (27,28,29) for writing marks in the track via the beam,
 - a front-end unit (31) for generating a scanning signal (33) for detecting marks in the track, and
 - wobble detection means (32) for retrieving the first control information from the wobble modulation on the first recording layer and for locating the ending part and retrieving the
 - 10 second control information from the wobble modulation on the second recording layer.

5. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information is recorded in the lead-in part and the second control information 15 layer is recorded in the ending part.

6. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information and the second control information are recorded in the lead-in 20 part.

7. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information is recorded in the lead-in part and the second control information 25 is recorded in the lead-in part and also in the ending part.

8. Device as claimed in claim 4, wherein the device comprises a control unit (20) for performing an initialize procedure after inserting the record carrier, in which procedure the first control information is recorded in the lead-in part and also in the ending part and the 30 second control information is recorded in the lead-in part second control information is recorded in the lead-in part and also in the ending part.